MATERIAL SAFETY DATA SHEET

PHOSPHATE ROCK

SECTION 1: CHEMICAL PRODUCTS & COMPANY IDENTIFICATION

New Brunswick Laboratory
U. S. Department of Energy
9800 South Cass Avenue
Argonne, IL 60439
1-630-252-CRMS

Off Hours Emergency Numbers:
1-630-252-6131 or 1-630-252-5731

CAS Number: Not available

Substance: Phosphate Rock

Trade Names/Synonyms: CRM 1-A

Chemical Family:

Powdered rock

Mineral

Creation Date: December 15, 1994 Revision Date: January 5, 2004

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component: Phosphate Rock

CAS Number: Not available

Percentage: 100 Weight %

Other Contaminants: Uranium 0.0153 Weight % (See Certificate of Analysis)

SECTION 3: HAZARDS IDENTIFICATION

This reference material is composed of raw rock that has been pulverized, milled and blended. The uranium found in this material is that naturally present in the rock.
The uranium content of this reference material is so low that it is not considered to be a radioactive material by Department of Transportation definitions.

This is a powdered material, which may cause irritation to skin, eyes, or mucous membranes. Care should be taken to avoid inhalation or ingestion.

NFPA RATINGS (SCALE 0-4): HEALTH=U FIRE=0 REACTIVITY=0

CERCLA Ratings (SCALE 0-3): HEALTH = U; FIRE = 0; REACTIVITY = 0; PERSISTENCE = 3

NFPA RATINGS (SCALE 0-4): HEALTH = U; FIRE = 0; REACTIVITY = 0

CARCINOGEN STATUS:

OSHAN
NTP: N
IARC: N

SECTION 4: FIRST AID MEASURES

EYES: Flush with running water.

INHALATION: Remove to fresh air. Give oxygen with artificial respiration as needed. Seek medical attention for treatment, observation and support as needed.

SKIN CONTACT: Wash with soap and water.

SECTION 5: FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD: Negligible fire hazard when exposed to heat or flame.

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray, or regular foam. (See the 2000 *Emergency Response Guidebook*, ERG 2000, developed jointly by Transport

Canada (TC), and the U. S. Department of Transportation (DOT), and the Secretariat of Transportation and Communications of Mexico (SCT).)

For Larger Fires, use water spray or fog (flooding amounts) (2000 *Emergency Response Guidebook*, ERG 2000).

FIREFIGHTING: Move container from fire area if you can do it without risk. Apply cooling water to sides of containers exposed to flames until well after fire is out (2000 *Emergency Response Guidebook*, ERG 2000).

Do not move damaged containers; move undamaged containers out of fire zone. For massive fire in cargo area, use unmanned hose holder or monitor nozzles (2000 *Emergency Response Guidebook*, ERG 2000).

Contact the local, State, or Department of Energy radiological response team. Use suitable agent for surrounding fire. Cool containers with flooding amounts of water; apply from as far a distance as possible. Avoid breathing dusts or vapors, keep upwind. Keep unnecessary people out of area until declared safe by radiological response team.

FLASH POINT: Non-flammable solid.

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition may release toxic/hazardous gases.

SECTION 6: ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL SPILL: No special or extraordinary measures beyond the dictates of good housekeeping are indicated.

SECTION 7: HANDLING AND STORAGE

Observe all Federal, State and local regulations when storing this substance.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exercise precautions appropriate for an analytical chemistry laboratory environment, such as wearing a labcoat and safety glasses or goggles.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Description: Ecru colored powder

Molecular formula: Not applicable

Boiling point: Decomposes

Melting point: 1300°C (2372°F) decomposes

Specific Gravity: Not Known

Water Solubility: Insoluble

Solvent Solubility: Nitric acid, sulfuric acid

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Stable under normal temperatures and pressures.

CONDITIONS TO AVOID: No potentially hazardous conditions could be found in the literature, nor could any accidents be recalled in which phosphate rock reacted in a hazardous manner.

SECTION 11: TOXICOLOGY INFORMATION

Particulate matter may irritate and damage the eyes.

No toxicology information specific to phosphate rock is available.

SECTION 12: ECOLOGICAL INFORMATION

Environmental Impact Rating (0-4): No data available

Acute Aquatic Toxicity: No data available

Degradability: No data available

Log Bioconcentration Factor (BCF): No data available

Log Octanol/water partition coefficient: No data available

SECTION 13: DISPOSAL INFORMATION

Observe all Federal, State and local Regulations when disposing of this substance.

SECTION 14: TRANSPORTATION INFORMATION

U.S. Department of Transportation Hazard Classification, 49 CFR 173 Subpart I - Class 7 - (Radioactive) Materials

U.S. Department of Transportation Labeling Requirements 49 CFR 172.101 and 49CFR 172 Subpart E - Labeling and 172.402; Additional Labeling requirements for subsidiary hazards.

U.S. Department of Transportation Shipping Name-ID Number, Hazard Class or Division, 49 CFR 172.101

U.S. Department of Transportation Packaging Authorizations:
Exceptions: 49 CFR 173.421, and 173.453
Specific requirements: 49 CFR 173.455
Non-Bulk Packaging: 49 CFR 173.415, or 173.417
Bulk Packaging: None

SECTION 15: REGULATORY INFORMATION

TSCA STATUS: N

CERCLA SECTION 103 (40 CFR 302.4):	N
SARA SECTION 302 (40 CFR 355.30):	N
SARA SECTION 304 (40 CFR 355.40):	N
SARA SECTION 313 (40 CFR 372.65):	N
OSHA PROCESS SAFETY (29 CFR 1910.119):	N
CALIFORNIA PROPOSITION 65:	N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40 CFR 370.21)

ACUTE HAZARD:	N
CHRONIC HAZARD:	N
FIRE HAZARD:	N
REACTIVITY HAZARD:	N

SUDDEN RELEASE HAZARD: N

SECTION 16: OTHER INFORMATION

This material is prepared for use as a standard or in interlaboratory comparison programs at analytical laboratories, which routinely handle uranium and/or plutonium. The New Brunswick Laboratory (NBL) assumes that recipients of this material have developed internal safety procedures, which guard against accidental exposure to radioactive and toxic materials, contamination of the laboratory environment, or criticality. NBL further expects that personnel who handle radioactive materials have been thoroughly trained in the safety procedures developed by and for their Laboratory.

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